

## ABSTRACT

It is an object of the present invention to provide enzymes that have high endoglucanase activity and yet exhibit high activity even under alkaline conditions, and genes encoding the same. The enzyme according to the invention has the following properties: a) exhibiting endoglucanase activity; and b) capable of completely removing fuzz from regenerated cellulose fabrics at a concentration of 1 mg of the protein/L or below. The enzyme of the invention having endoglucanase activity is a protein comprising the amino acid sequence as shown in SEQ ID NO: 1, 3, 5, 7, 9 or 11; a modified protein thereof exhibiting endoglucanase activity; or a homologue of the protein or the modified protein.